

DEPARTMENT OF ENVIRONMENT AND CONSERVATION TENNESSEE DIVISION OF AIR POLLUTION CONTROL ANNUAL INSPECTION

Reference No.:

41-0011

Environmental Specialist: JK

State Class:

CM

Route To:

CMW

Pollutant(s):

VOCs

Date Inspected:

June 23, 2009

Company:

TRICOR

Location address:

Turney Center Industrial Prison

1499 R. W. Moore Memorial Highway

City/State/Zip:

Only, TN 37140-4050

Company Contact/Title:

John Mack Brown

Don Goolsby

Maintenance Manager

Gen. Mgr. Of Mfg

240 Great Circle Rd.

TRICOR @ Turney Center

Suite 310

1499 R. W. Moore Memorial Hwy.

Only, TN 37340

Nashville, TN 37228-2696

(931) 729-5161 ext. 2210

Phone: (cell) Fax:

(615) 308-1581 (615) 741-7426

(931) 729-2997

Email:

John.Brown@tn.gov

Don.Goolsby@tn.gov.

Does Company impact an additional control area? YES/NO: NO If Yes, pollutant type:

Does Company have: NSPS (Part 60)?

EE

PSD?

NESHAPS (Part 61)?

No

MACT (Part 63)

to

·Νο No

If YES, give subpart for NSPS, NESHAPS, MACT

Sources If YES to any, indicate point number(s): 07

Date of the last annual inspection:

May 29, 2008

Time period covered by this inspection, from:

January 2008

December 2008

Is inspection partial or comprehensive?

Comprehensive

Total time required for this inspection (hours):

Was company in compliance during entire inspection time period?

Yes

If NO, explain in final paragraph

If CM source:

Date report received in EFO: (postmarked)

Date report review complete/acknowledged by EFO:

March 31, 2009

May 29, 2009

Did report have deviations from permit conditions (Y/N)?

No

EXECUTIVE SUMMARY:

Tennessee Rehabilitative Initiative in Correction (TRICOR) operates several manufacturing industries within the confines of the TDOC Turney Center Prison located in Only, Tennessee. They are as follows: Point 03 – Woodworking Operation; Point 04 – Wood Furniture Coating Operation; Point 07 – Metal Furniture Coating Operation; and Point 09 – Sign Plant Operation.

The conditional major operating permit (#454137P) for this facility was issued on October 18, 2004 and is set to expire on June 1, 2014. This permit will be used in this report to determine compliance.

The two previous inspections conducted on June 26, 2007 and May 29, 2008 were both comprehensive and covered the entire source. In both cases, the facility was in compliance with all permit conditions.

General Permit Conditions:

Condition #1 identifies Mr. John M. Brown as the person that binds the facility in environmental and permitting affairs. No changes have been made. The facility is in compliance.

Condition #2 notes that the facility has elected to opt out of being considered a major source of air pollutants. The facility has agreed to be subject to limitations in order to be below major source thresholds of 10, 25 and 100 tons per year of single Hazardous Air Pollutants (HAPs), combinations of HAPs and Volatile Organic Compounds (VOCs), respectively. This is an informational condition; compliance will not be addressed in this report.

Condition #3 places the facility on notice that conditions #5 and #6 contain limitations that allow the facility to avoid being considered a major source. Failure to be in compliance may result in State of Tennessee or Federal enforcement action(s). Data received in the annual report indicates compliance.

Condition #4 requires that the facility report in writing to the Technical Secretary any non-compliance with conditions set to restrain the "potential to emit" within three working days of discovery of same. When asked, Mr. Brown said that the facility had not had any non-compliance issues.

Condition #5 limits VOCs emitted from this source to less than 95 tons during all intervals of twelve consecutive months. For the purpose of calculating facility-wide VOC emissions, five tons will be added to overall emissions to allow for aerosol can spraying, welding, machinery lubrication and other similar operations. Compliance with this condition shall be determined from the logs required by condition #15. According to data received in the conditional major report, the facility's highest emissions occurred during the twelve-consecutive-month month period ending December, 2008, with emissions of 12.86 tons of VOCs. The facility failed to submit twelve consecutive month data as required by this condition; however the facility is in compliance with the limit set forth in this condition.

Condition #6 limits single HAPs to less than 9.2 tons during all intervals of twelve-consecutive-months. Any combination of HAPs shall not exceed 22.5 tons during all intervals of twelve-consecutive-months. HAPs emitted from spraying aerosol cans, welding, machinery lubrication, and other similar (non-permitted) shall be estimated to be less than one ton per year. This figure will be added to the facility-wide total of actual HAP emissions for each twelve consecutive month period. According to the data received in the conditional major report, the facility's highest single HAP emissions occurred during the twelve-consecutive-month period ending December, 2008 with 4.36 tons of xylene emitted. The facility's highest combined HAP emissions occurred during the twelve-consecutive-month period ending December, 2008, with 7.12 tons of combined HAP emissions. The facility failed to submit twelve consecutive month data as required by this condition; however the facility is in compliance with the limit set forth in this condition.

Condition #7 requires that purchase orders and invoices for all VOC and HAP containing materials, MSD sheets be maintained for at least five years in order to allow for inspection by Tennessee Division of Air Pollution Control (TDAPC) personnel. These records must list the VOC content in pounds per gallon and HAP content by weight. Purchase orders and receipts are generated and kept at the TRICOR office in a black three ring binder. The source specific materials spreadsheet is an example of this log. The facility is in compliance.

Condition #8 limits visible emissions from any stack opening or vent to less than 20% opacity as determined by EPA Method 9, except for one six minute period in one hour, or less than twenty-four minutes in twenty-four hours is allowed. No official VEE was performed during the on-site inspection, as no visible emissions were observed from the stack, doors or openings. The facility is in compliance.

Condition #9 determines the test method(s) and procedures required to prove compliance, if needed, for each pollutant, as follows: Particulate Matter (PM)-EPA Method 5. VOC content of surface coatings: EPA Method 24. This is an informational condition; compliance will not be addressed in this report.

Condition #10 states that excess emissions shall be addressed as specified in TDAPCR 1200-3-20. There have been no excess emissions during this reporting period, the facility is in compliance.

Condition #11 requires that a report stating the compliance status of this facility with permit conditions #5, #6, #24, and #26 must be submitted by March 31 of every year beginning 2005. This report is to include the records required by conditions #15 and #26. The Columbia Environmental Field Office (EFO) received this report on March 31, 2009. According to the data in this report the facility is in compliance with the referenced permit conditions.

Condition #12 requires that the VOC content in pounds per gallon of all VOC containing materials be determined and compiled in tabular format. These calculations are to be updated within 90 days of the initial use or change in formulation. The facility is in compliance.

Condition #13 states that the current permit supersedes previous permit(s). This is an informational condition; no compliance determination is necessary.

Condition #14 requires that the facility apply for renewal of this permit at least sixty days prior to the expiration date of the permit. Permit #454173P expires on June 1, 2014.

Condition #15 requires that the facility calculate the actual quantities of VOCs and HAPs emitted from this facility each month and all periods of twelve consecutive months. These logs shall readily show compliance with conditions #5 and #6 and be updated within thirty days of the end of each month and retained for at least five years. The facility failed to submit the twelve consecutive month totals as required by this condition. The facility is in compliance with the VOC and HAP limits; however is not in compliance with this condition for the reason previously stated (see attached).

41-0011-03 Woodworking Operation

Condition #16 limits process weight rate to 800 pounds per hour (lb/hr). The facility has not modified this source since the issuance of this permit; therefore the process weight rate has not changed. The facility is in compliance.

Condition #17 limits the PM emitted from this source to less than 4.63 lbs/hr. Compliance with this condition is assured by not operating without the control equipment. Mr. Brown stated that this source never operates without the appropriate control equipment. The facility is in compliance.

Routine maintenance is to be performed on the air pollution control devices (Condition #18). The facility maintains the air pollution control devices in good working order. The maintenance records were observed and a sample obtained during the on-site inspection (see attached). They were being kept as required by this condition. The facility is in compliance.

Condition #19 states that should a malfunction occur, operation of the processes served by the device shall be as described by TAPCR 1200-3-20. When asked, Mr. Brown said that the facility has not had malfunction(s) of the control device(s). The facility is in compliance.

41-0011-04 Spray Coating Operations

This source consists of five spray booths and a gas-drying oven for the coating of wood furniture. Exhaust filters are used as controls. This source was not in operation at the time of the inspection.

Condition #20 requires that the PM emitted from this source not exceed 0.925 lbs/hr. Compliance with this condition is assured by this source never operating without the control equipment (exhaust filters) operating properly. Mr. Brown stated that this source always operates with the control equipment in proper operation. The exhaust filters were in place and are changed routinely according to loading.

Visible emissions from the stack(s) are not to exceed 10% opacity as determined by EPA Method 9 (Condition #21). No official VEE was performed during the on-site inspection as no visible emissions were observed from the coating operations. The facility is in compliance.

Condition #22 requires that routine maintenance as required to maintain specified emissions limits be performed on the air pollution control device(s). Maintenance logs are to be recorded in a suitable permanent form (see attached). The facility maintains maintenance logs in the manager's office. These logs were reviewed during the on-site inspection. The facility is in compliance.

Condition #23 addresses malfunction(s) of the emission control devices. Should malfunction occur, operation of the processes served by the device(s) shall be regulated by TADPCR 1200-3-20. Both the oven and the stack from the exhaust filters have been not in operation since high winds blew the stack down. This is an informational condition; compliance is not addressed in this report.

41-0011-07 Surface Coating of Metal Furniture (NSPS)

This source is a surface coating operation for metal furniture and miscellaneous metal products. This operation consists of four (4) electrostatic spray booths and an associated curing oven. The facility has completely eliminated all liquid surface coating of the furniture. There is also a separate spray room for coating large objects and other special operations. Mr. Brown reports that a large order for coated fencing has resulted in use of large amounts of VOC containing coatings, with particulates controlled via dry filters. This source was not in operation during the on-site inspection.

Condition #24 limits VOC emitted from this source to less than 40 tons during all intervals of 12 consecutive months. Compliance with this condition is indicated from the records required by condition #15. According to the conditional major report, the entire facility emitted a total of 17.86 tons of combined VOC's during the twelve-month period ending December 2008 (see attached). The facility is in compliance.

Condition #25 requires that the facility furnish the results of the performance test required by 40 CFR 60, subpart EE within a year of the issuance of permit #454137P. Mr. Brown says the facility is no longer coating metal furniture with VOC-containing coatings. The permit states clearly that metal furniture is the only product subject to these restrictions. The facility has data that would indicate that liquid, VOC solvent coatings are being utilized on miscellaneous metal (fencing). With conditions #25 and #26 disregarded, there is no recording requirement. Compliance will be deferred to either West Tennessee Permitting (see below).

Condition #26 limits the emission rate from the metal furniture operation to 7.51 pounds of VOC per gallon of solids applied, monthly. As discussed in condition #25, TRICOR has never performed the initial performance test or any of the monthly tests and records required by this condition. Mr. Brown said that a large fencing order used most of 1,350 gallons of Dumpster brown, used as a colored primer and varying amounts of other coatings to achieve the correct color. According to yearly data received in the CM report, Forest Green is the highest VOC containing coating used on metal, with 4.98 lb/gal. The highest usage was in the 12 consecutive month period ending December, 2008. Without the detailed information required in conditions #25 and #26, the monthly emissions cannot be determined. The facility appears to be well under the facility-wide limit of 40 tons per twelve consecutive month period on the December entry.

Condition #27 limits TSP to less than 1.08 lb/hr (TAPCR 1200-3-7-.01(5)). Compliance is indicated by use of exhaust filters. Mr. Brown said the facility always uses the control equipment when operating. This source was not in operation during the on–site inspection. New filters were visible in the exhausts.

Condition #28 requires that the visible emissions from the stacks not exceed 10% opacity as determined by EPA Method 9. No official VEE was performed during the on-site inspection as no spray coating was taking place. The facility is in compliance.

Condition #29 requires that routine maintenance as required to maintain specified emissions limits be performed on the air pollution control device(s). Maintenance logs are to be recorded in a suitable permanent form and kept on-site for at least five years. The facility maintains these logs regularly as part of facility maintenance.

Condition #30 addresses failure of the emission control device(s). Should malfunction occur, the operation of the processes served by the malfunctioning devices shall be as described in TADPCR 1200-3-20. This is an informational condition; compliance will not be addressed in this report. In the case of the stack, the filter(s) are the critical part.

41-0011-09 Sign Plant and Dip Coating Operation

This source consisted of one spray booth with exhaust filter control, one cleaning operation, one coating dip tank with dry off area and screen printing equipment. This source was not to operate unless the control equipment (exhaust filters) were in place and operating properly. The spray booth, screen printing equipment, cleaning operation, dip tank and dry off area are off site.

Condition #31 limits particulate matter (TSP) to less than 0.02 grains per dry standard cubic foot (dscf). Operating this source with exhaust filters functioning properly is required to be in compliance with this condition. When this source was in operation, exhaust filters are always in place. The facility is in compliance.

Condition #32 requires that routine maintenance as required to maintain specified emissions limits be performed on the air pollution control device(s). Maintenance logs are to be recorded in a suitable permanent form. The facility keeps maintenance logs as required by this condition, although no work has been done on the off-site machinery.

There are currently no complaints registered against this facility. A Notice of Violation is being issued in conjunction with this report for failure to comply with all permit conditions as stipulated in the operating permit (TDAPCR 1200-3-9.02 (6).

It is the opinion of this inspector that TRICOR at Turney Center is **Not In Compliance** in that compliance problems were found as described previously in this report.

Inspector's Name

VEE Certification Number:

Certification Expiration Date:

2200

September 2009

I verify that the format and content of this report conforms to established TN Division of Air Pollution Control annual inspection standard operational procedures guidance and that the compliance determination made in this report is correct.

Supervisor/Manager

B5X1

Date